

ABSTRACT

A method for eliminating loops in a communication network in which the nodes operate as virtual bridges, having virtual ports that link the virtual bridges over virtual connections, each of the virtual connections coinciding respectively with one or more segments of the network. Respective port costs are assigned to the virtual ports responsive to a count of the network segments with which the respective virtual connections coincide, so as to favor virtual paths between pairs of the nodes that are made up of a greater number of the virtual connections, relative to the virtual paths that are made up of a lesser number of the virtual connections. Respective path costs are computed for the virtual paths, based on the port costs, and the virtual connections over which to send traffic between the virtual bridges are selected responsive to the path costs.